Current Status of All Claims in the Application:

1. (Previously Presented) A stage assembly that moves a device along an X axis between a first region, a transition region, and a second region, the stage assembly comprising:

a device table that retains the device;

a X mover connected to the device table and moving the device table along the X axis;

a measurement system that monitors the position of the device table, the measurement system including a first X system that provides a first X position signal that indicates the position of the device table along the X axis when the device table is in the first region and a second X system that provides a second X position signal that indicates the position of the device table along the X axis when the device table is in second region; and

a control system connected to the X mover and the measurement system, the control system receiving the X position signals from the X systems and directs current to the X mover to move the device table along the X axis from the first region to the second region with a plurality of servo cycles, wherein the control system switches from the first X system to the second X system within a predetermined number of servo cycles in the transition region.

2. (Original) The stage assembly of claim 1 wherein the first X system indicates the position of the device table along the X axis when the device table is in the transition region and the second X system indicates the position of the device table along the X axis when the device table is in the transition region.

3. (Original) The stage assembly of claim 1 wherein the control system directs current to the X mover so that the device table is moving at an approximately constant velocity along the X axis while switching from the first X system to the second X system.

4. (Original) The stage assembly of claim 1 wherein the control system utilizes the first X position signal from the first X system to control the X mover prior to the switching of position signals and the control system utilizes the second X position signal from the second X system to control the X mover after the switching of position signals.

5. (Previously Presented) The stage assembly of claim 72 wherein the one servo cycle lasts between approximately 0.1 and 1 milliseconds.

6. (Previously Presented) The stage assembly of claim 1 wherein the control system offsets the second X position signal to approximately match the first X position signal.

7. (Previously Presented) The stage assembly of claim 1 wherein the control system offsets the second X position signal to approximately match the first X position signal within one servo cycle.

8. (Original) The stage assembly of claim 1 further comprising a Y mover connected to the device table and moving the device table along a Y axis.

9. (Original) The stage assembly of claim 8 wherein the measurement system includes a first Y system that provides a first Y position signal that indicates the position of the device table along the Y axis in the first region and a second Y system that provides a second Y position signal that indicates the position of the device table along the Y axis in the second region; wherein the control system receives the Y position signals from the measurement system and directs current to the Y mover to move the device table along the Y axis.

10. (Original) The stage assembly of claim 9 wherein the measurement system includes a third Y system that provides a third Y position signal that indicates the position of the device table along the Y axis in the first region, the transition region and the second region; and wherein the control system switches from the first Y system to the third Y system in the first region.

11. (Previously Presented) The stage assembly of claim 10 wherein the control system directs current to the Y mover so that the device table is moving at an approximately constant velocity along the Y axis before and after the switching between the first Y system and the third Y system.

12. (Previously Presented) The stage assembly of claim 10 wherein the control system utilizes the first Y position signal from the first Y system to control the Y mover prior to the switch from the first Y system to the third Y system and the control system utilizes the third Y position signal from the third Y system to control the Y mover after the switch from the first Y system to the third Y system.

13. (Previously Presented) The stage assembly of claim 12 wherein the control system switches from the third Y system to the second Y system in the second region and the control system utilizes the third Y position signal from the third Y system to control the Y mover prior to the switch from the third Y system to the second Y system and the control system utilizes the second Y position signal from the second Y system to control the Y mover after the switch from the third Y system to the second Y system.

14. (Previously Presented) The stage assembly of claim 10 wherein the control system offsets the third Y position signal to approximately match the first Y position signal within one servo cycle.

15. (Original) The stage assembly of claim 14 wherein the control system adjusts the second Y position signal to be approximately equal to third Y position signal within one servo cycle.

16. (Original) An exposure apparatus including the stage assembly of claim 1.

17. (Original) A device manufactured with the exposure apparatus according to claim 16.

18. (Previously Presented) A wafer on which an image has been formed by the exposure apparatus of claim 16.

19. (Previously Presented) A stage assembly that moves a device along an X axis and a Y axis between a first region, a transition region, and a second region, the stage assembly comprising:

a device table that retains the device;

an X mover connected to the device table and moving the device table along the X axis;

a Y mover connected to the device table and moving the device table along the Y axis;

a measurement system that monitors the position of the device table, the measurement system including a first X system that provides a first X position signal that indicates the position of the device table along the X axis when the device table is in the first region and the transition region, a second X system that provides a second X position signal that indicates the position of the device table along the X axis when the device table is in second region and the transition region, a first Y system that provides a first Y position signal that indicates the position of the device table along the Y axis when the device table is in the first region and a second Y system that provides a second Y position signal that indicates the position of the device table along the Y axis when the device table is in second

region; and

a control system connected to the X mover, the Y mover, and the measurement system, the control system receiving the position signals from the systems and directs current to the movers to move the device table along the X axis and along the Y axis from the first region to the second region with a plurality of servo cycles, wherein the control system switches from the first X system to the second X system within a predetermined number of servo cycles when the device table is in the transition region.

20. (Currently Amended) The stage assembly of claim 19 wherein the control system directs current to the X mover so that the device table is moving at an approximately constant velocity along the X axis before and after the switching between the X ~~system~~ systems.

21. (Currently Amended) The stage assembly of claim 19 wherein the control system utilizes the first X position signal from the first X system to control the X mover prior to the switching between the X system and the control system utilizes the second X position signal from the second X system to control the X mover after the switching between the X ~~system~~ systems.

22. (Previously Presented) The stage assembly of claim 19 wherein the control system offsets the second X position signal to approximately match the first X position signal within one servo cycle.

23. (Original) The stage assembly of claim 19 wherein the measurement system includes a third Y system that provides a third Y position signal that indicates the position of the device table along the Y axis in the first region, transition region and the second region.

24. (Original) The stage assembly of claim 23 wherein the control system switches from the first Y system to the third Y system in the first region, and the control system utilizes the first Y position signal from the first Y system to control the Y mover prior to switching and the control system utilizes the third Y position signal from the third Y system to control the Y mover after switching of position signals.

25. (Original) The stage assembly of claim 24 wherein the control system switches from the third Y system to the second Y system in the second region, and the control system utilizes the third Y position signal from the third Y system to control the Y mover prior to switching and the control system utilizes the second Y position signal from the second Y system to control the Y mover after the switching of position signals.

26. (Original) The stage assembly of claim 25 wherein the control system directs current to the Y mover so that the device table is moving at an approximately constant velocity along the Y axis before and after the switching of position signals.

27. (Previously Presented) The stage assembly of claim 25 wherein the control system offsets the second Y position signal to approximately match the third Y position signal within one servo cycle.

28. (Original) The stage assembly of claim 24 wherein the control system adjusts the third Y position signal to be approximately equal to first Y position signal during the position signal switch.

29. (Original) An exposure apparatus including the stage assembly of claim 19.

30. (Original) A device manufactured with the exposure apparatus according to claim 29.

31. (Original) A wafer on which an image has been formed by the exposure apparatus of claim 29.

32. (Previously Presented) A stage assembly that moves a device along an X axis between a first region, a transition region, and a second region, the stage assembly comprising:

a device table that retains the device;

a X mover connected to the device table and moving the device table along the X axis;

a measurement system that monitors the position of the device table, the measurement system including a first X system that provides a first X position signal that indicates the position of the device table along the X axis when the device table is in the first region and a second X system that provides a second X position signal that indicates the position of the device table along the X axis when the device table is in second region; and

a control system connected to the X mover and the measurement system, the control system receiving the X position signals from the X systems and directs current to the X mover to move the device table along the X axis from the first region to the second region with a plurality of servo cycles, wherein the control system does not direct current to the X mover during a predetermined number of servo cycles when the device table is in the transition region.

33. (Original) The stage assembly of claim 32 wherein the first X system indicates the position of the device table along the X axis when the device table is in the transition region and the second X system indicates the position of the device table along the X axis when the device table is in the transition region.

34. (Currently Amended) The stage assembly of claim ~~32~~ 74 wherein the control system directs current to the X mover so that the device table is moving at an approximately constant velocity along the X axis immediately prior to the at least one skipped servo cycle.

35. (Currently Amended) The stage assembly of claim ~~32~~ 74 wherein the control system utilizes the first X position signal from the first X system to control the X mover prior to the at least one skipped servo cycle and the control system utilizes the second X position signal from the second X system to control the X mover after the at least one skipped servo cycle.

36. (Original) The stage assembly of claim 35 wherein the at least one skipped servo cycle lasts between approximately 0.1 and 1 milliseconds.

37. (Previously Presented) The stage assembly of claim 32 wherein the control system offsets the second X position signal to approximately match the first X position signal.

38. (Previously Presented) The stage assembly of claim 32 wherein the control system offsets the second X position signal to approximately match the first X position signal within one servo cycle.

39. (Previously Presented) The stage assembly of claim 32 wherein the control system flushes previous X position signals from the X systems within one servo cycle.

40. (Original) The stage assembly of claim 32 further comprising a Y mover connected to the device table and moving the device table along a Y axis.

41. (Original) The stage assembly of claim 40 wherein the measurement

system includes a first Y system that provides a first Y position signal that indicates the position of the device table along the Y axis in the first region and a second Y system that provides a second Y position signal that indicates the position of the device table along the Y axis in the second region; wherein the control system receives the Y position signals from the measurement system and directs current to the Y mover to move the device table along the Y axis; and wherein the control system does not direct current to the Y mover for at least one servo cycle when the device table is in the transition region.

42. (Original) The stage assembly of claim 41 wherein the measurement system includes a third Y system that provides a third Y position signal that indicates the position of the device table along the Y axis in the first region, transition region and the second region; and wherein the control system does not direct current to the Y mover for at least one servo cycle when the device table is in the transition region.

43. (Original) The stage assembly of claim 42 wherein the control system directs current to the Y mover so that the device table is moving at an approximately constant velocity along the Y axis immediately prior to each of the skipped servo cycles.

44. (Original) The stage assembly of claim 42 wherein the control system utilizes the first Y position signal from the first Y system to control the Y mover prior to at least one skipped servo cycle and the control system utilizes the third Y position signal from the third Y system to control the Y mover after at least one skipped servo cycle.

45. (Original) The stage assembly of claim 44 wherein the control system utilizes the third Y position signal from the third Y system to control the Y mover prior to one of the skipped servo cycles and the control system utilizes the second Y position signal from the second Y system to control the Y mover after one of the skipped servo cycles.

46. (Previously Presented) The stage assembly of claim 42 wherein the control system offsets the third Y position signal to approximately match the first Y position signal during one of the skipped servo cycles.

47. (Previously Presented) The stage assembly of claim 46 wherein the control system offsets the second Y position signal to approximately match the third Y position signal during one of the skipped servo cycles.

48. (Original) An exposure apparatus including the stage assembly of claim 32.

49. (Original) A device manufactured with the exposure apparatus according to claim 48.

50. (Original) A wafer on which an image has been formed by the exposure apparatus of claim 48.

51. (Currently Amended) A stage assembly that moves a device along an X axis and a Y axis between a first region, a transition region, and a second region, the stage assembly comprising:

a device table that retains the device;

a Y mover connected to the device table and moving the device table along the Y axis;

a measurement system that monitors the position of the device table, the measurement system including a first Y system that provides a first Y position signal that indicates the position of the device table along the Y axis when the device table is in the first region, a second Y system that provides a second Y position signal that indicates the position of the device table along the Y axis when the device table is in the second region and a third Y system that provides a third Y position signal when the device table is in the first region, the second region and the

transition region; and

a control system connected to the Y mover and the measurement system, the control system receiving the position signals from the Y systems and ~~directs~~ directing current to the Y mover to move the device table along the Y axis from the first region to the second region with a plurality of servo cycles, wherein the control system switches from the first Y system to the third Y system within a predetermined number of servo cycles when the device table is in the first region.

52. (Currently Amended) The stage assembly of claim 51 wherein the control system directs current to the Y mover so that the device table is moving at an approximately constant velocity along the X axis before and after the switching ~~of~~ between the Y systems.

53. (Currently Amended) The stage assembly of claim 51 wherein the control system utilizes the first Y position signal from the first Y system to control the Y mover prior to the switching between the Y systems and the control system utilizes the third Y position signal from the third Y system to control the Y mover after the switching between the Y systems.

54. (Previously Presented) The stage assembly of claim 53 wherein the control system offsets the third Y position signal to approximately match the first Y position signal within one servo cycle.

55. (Original) The stage assembly of claim 51 wherein the control system switches from the third Y system to the second Y system within one servo cycle when the device table is in the second region and the control system utilizes the third Y position signal from the third Y system to control the Y mover prior to switching and the control system utilizes the second Y position signal from the second Y system to control the Y mover after the switching of position signals.

56. (Previously Presented) The stage assembly of claim 55 wherein the control system offsets the second Y position signal to approximately match the third Y position signal within one servo cycle.

57. (Original) An exposure apparatus including the stage assembly of claim 51.

58. (Currently Amended) A device manufactured with the exposure apparatus according to claim ~~51~~ 57.

59. (Original) A wafer on which an image has been formed by the exposure apparatus of claim 57.

60. (Previously Presented) A method for making a stage assembly for moving a device along an X axis between a first region, a transition region, and a second region, the method comprising the steps of:

providing a device table that retains the device;

connecting an X mover to the device table, the X mover moving the device table along the X axis;

providing a measurement system, the measurement system including a first X system that provides a first X position signal that indicates the position of the device table along the X axis when the device table is in the first region and a second X system that provides a second X position signal that indicates the position of the device table along the X axis when the device table is in second region; and

connecting a control system to the X mover and the measurement system, wherein the control system switches between the X systems during a predetermined number of servo cycles when the device table is in the transition region.

61. (Currently Amended) The method of claim 60, wherein the control system directs current to the X mover so that the device table is moving at an approximately constant velocity along the X axis ~~while~~ during the switching of the X systems.

62. (Original) The method of claim 60 wherein the control system utilizes the first X position signal from the first X system to control the X mover prior to the switching of the X systems and the control system utilizes the second X position signal from the second X system to control the X mover after the switching of X systems.

63. (Previously Presented) The method of claim 62, wherein the control system offsets the second X position signal to approximately match the first X position signal during switching of X systems.

64. (Original) The method of claim 60 further comprising the step of connecting a Y mover to the device table, the Y mover moving the device table along a Y axis.

65. (Original) The method of claim 64 wherein the measurement system includes a first Y system that provides a first Y position signal that indicates the position of the device table along the Y axis in the first region, a second Y system that provides a second Y position signal that indicates the position of the device table along the Y axis in the second region and a third Y system that provides a third Y position signal that indicates the position of the device table along the Y axis in the first region, transition region and the second region.

66. (Currently Amended) The method of claim 65, wherein the control system switches between the Y systems during movement of the device table along the Y axis, and wherein the control system directs current to the Y mover so that the device table is moving at an approximately constant velocity along the Y axis before and after switching between Y systems.

67. (Previously Presented) The method of claim 66, wherein the control system offsets the third Y position signal to approximately match the first Y position signal during switching between the first Y system and the third Y system.

68. (Original) The method of claim 67, wherein the control system adjusts the second Y position signal to be approximately equal to third Y position signal during switching between the third Y system and the second Y system.

69. (Original) A method for making an exposure apparatus that forms an image on a wafer, the method comprising the steps of:

providing an irradiation apparatus that irradiates the wafer with radiation to form the image on the wafer; and

providing the stage assembly made by the method of claim 60.

70. (Original) A method of making a wafer utilizing the exposure apparatus made by the method of claim 69.

71. (Original) A method of making a device including at least the exposure process; wherein the exposure process utilizes the exposure apparatus made by the method of claim 69.

72. (Previously Presented) The stage assembly of claim 1, wherein the control system switches from the first X system to the second X system within one servo cycle in the transition region.

73. (Previously Presented) The stage assembly of claim 19, wherein the control system switches from the first X system to the second X system within one servo cycle when the device table is in the transition region.

74. (Previously Presented) The stage assembly of claim 32, wherein the control system does not direct current to the first X mover during at least one servo cycle when the device table is in the transition region.

75. (Previously Presented) The stage assembly of claim 51, wherein the control system switches from the first Y system to the third Y system within one servo cycle when the device table is in the first region.

76. (Currently Amended) The stage assembly of claim 60, wherein the control system switches ~~from~~ between the X systems during one servo cycle when the device table is in the transition region.

77. (New) The stage assembly of claim 1 wherein the first X system does not provide the first X position signal that indicates the position of the device table along the X axis during at least a portion of the period when the device table is in the second region.

78. (New) The stage assembly of claim 1 wherein the second X system does not provide the second X position signal that indicates the position of the device table along the X axis during at least a portion of the period when the device table is in the first region.

79. (New) The stage assembly of claim 32 wherein the first X system does not provide the first X position signal that indicates the position of the device table along the X axis during at least a portion of the period when the device table is in the second region, and wherein the second X system does not provide the second X position signal that indicates the position of the device table along the X axis during at least a portion of the period when the device table is in the first region.

80. (New) The method of claim 60 wherein the first X system does not provide the first X position signal that indicates the position of the device table along the X axis during at least a portion of the period when the device table is in the second region, and wherein the second X system does not provide the second X position signal that indicates the position of the device table along the X axis during at least a portion of the period when the device table is in the first region.